



MISSOURI DEPARTMENT OF
NATURAL RESOURCES
DIVISION OF GEOLOGY AND
LAND SURVEY
(573) 368-2165

CLOSED LOOP HEAT PUMP CERTIFICATION RECORD

OFFICE USE ONLY		DATE RECEIVED	
REF. NO.			
C.R. NO.		CHECK NO.	
STATE WELL NUMBER		TRANSMITTAL NO.	
ENTERED Ph1 Ph2 Ph3	APPROVED BY	ROUTE / /	

INFORMATION SUPPLIED BY PRIMARY CONTRACTOR OR DRILLING CONTRACTOR

OWNER NAME		TELEPHONE		VARIANCE GRANTED BY THE D.N.R. <input type="checkbox"/> NO <input type="checkbox"/> YES, ATTACH A COPY OF THE VARIANCE		
OWNER ADDRESS		CITY	STATE			ZIP CODE
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE)		CITY	STATE			ZIP CODE
PROPOSED USE OF WELL <input type="checkbox"/> HEAT PUMP WELL <input type="checkbox"/> HEAT PUMP TRENCH (ONLY > 10 FT)		<input type="checkbox"/> OTHER _____ <input type="checkbox"/> HEAT PUMP PIT (ONLY > 10 FT)		INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER)		DATE

SKETCH THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWN OR HIGHWAYS	LOCATION OF WELL		AREA _____
	LAT _____ ° _____ ' _____ "		ELEV _____
	LONG _____ ° _____ ' _____ "		COUNTY _____
		SMALLEST _____ 1/4 _____ 1/4 _____ 1/4	LARGEST _____ 1/4 _____ 1/4 _____ 1/4
		SEC. _____ TWN. _____ N RNG. _____ E OR W	

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL SITE	DRILLER NOTES:

INFORMATION FOR CLOSED LOOP MATERIAL

INFORMATION FOR HEAT PUMP WELLS

TYPE OF HEAT TRANSFER FLUID USED		HEAT PUMP TOTAL TON RATING		DIAMETER OF PIPE USED:		NUMBER OF HOLES DRILLED		DIAMETER OF DRILL HOLES		DEPTH OF DRILL HOLES	
TOTAL AMOUNT OF PIPE USED:		PIPE MATERIAL <input type="checkbox"/> POLYBUTYLENE <input type="checkbox"/> POLYETHYLENE <input type="checkbox"/> COPPER				TYPE OF GROUT USED <input type="checkbox"/> BENTONITE SLURRY NON SLURRY BENTONITE <input type="checkbox"/> PELLETS <input type="checkbox"/> CHIPS <input type="checkbox"/> GRANULAR		METHOD OF INSTALLATION <input type="checkbox"/> GRAVITY <input type="checkbox"/> TREMIE		ARE THE WELLS CONSTRUCTED THE SAME? <input type="checkbox"/> YES <input type="checkbox"/> NO, ATTACH DIFFERENCES IN CONSTRUCTION	
WAS LOOP MATERIAL MECHANICALLY CONNECTED? <input type="checkbox"/> YES <input type="checkbox"/> NO		WAS LOOP MATERIAL THERMALLY FUSED? <input type="checkbox"/> YES <input type="checkbox"/> NO				POSITION ON GROUT SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> SERIES OF 5 FT. PLUGS		POUNDS PER BAG		STATIC WATER LEVEL	
WAS PERMANENT CASING INSTALLED? <input type="checkbox"/> YES <input type="checkbox"/> NO		WAS FILL MATERIAL CHLORINATED? <input type="checkbox"/> YES <input type="checkbox"/> NO									
CASING DETAILS	LENGTH FT.	DIAMETER OF CASING IN.		MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL		CASING DRIVEN? <input type="checkbox"/> YES <input type="checkbox"/> NO					
	WEIGHT OR SDR#	DIAMETER OF DRILL HOLE		PACKER USED ON PVC CASING <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> COUPLING <input type="checkbox"/> INVERTED BELL							
CASING GROUT DETAILS	MATERIAL CEMENT BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> HI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS			NUMBER OF SACKS USED LBS. PER SACK		IF FULL LENGTH, TOTAL NUMBER OF BAGS USED		WERE BENTONITE PLUGS HYDRATED AFTER EMPLACEMENT? <input type="checkbox"/> YES <input type="checkbox"/> NO			
	METHOD OF INSTALLATION <input type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE PRESSURE <input type="checkbox"/> THROUGH TREMIE <input type="checkbox"/> TREMIE GROUT <input type="checkbox"/> THROUGH CASING			DRILLING SUSPENDED <input type="checkbox"/> YES <input type="checkbox"/> NO _____ HRS.		IF SERIES OF 5 FT. PLUGS, NUMBER OF BAGS USED		DEPTH TO TOP AND BOTTOM OF NEAR SURFACE PLUG (MEASURED FROM ORIGINAL GROUND SURFACE) TOP _____ FT. BOTTOM _____ FT.			
INFORMATION FOR HEAT PUMP TRENCH OR PIT						LIST DEPTH TO TOP OF EACH PLUG					
CONSTRUCTED DEPTH: _____ FT.						1. _____ FT.					
CONSTRUCTED LENGTH: _____ FT.						2. _____ FT.					
CONSTRUCTED WIDTH: _____ FT.						3. _____ FT.					
PRIMARY CONTRACTOR'S NAME				PERMIT NUMBER		4. _____ FT.					
						5. _____ FT.					
						DATE HEAT PUMP INSTALLATION WAS COMPLETED				DATE WELL DRILLING WAS COMPLETED	

I HEREBY CERTIFY THAT THE HEAT PUMP HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF HEAT PUMP WELLS.

SIGNATURE (WELL DRILLER)	PERMIT NUMBER	DATE	SIGNATURE (HEAT PUMP INSTALLER)	PERMIT NUMBER	DATE
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